

## PATENT

## ATTORNEY DOCKET NO:

## COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled LAC SHUTTLE VECTORS the specification of which

is attached hereto.  
 was filed on \_\_\_\_\_ as Application Serial No. \_\_\_\_\_  
and was amended on \_\_\_\_\_  
 was described and claimed in PCT International Application No. \_\_\_\_\_  
filed on \_\_\_\_\_ and as amended under PCT Article 19 on \_\_\_\_\_.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application(s) of which priority is claimed:

COUNTRY	APPLICATION NO.	FILING DATE	PRIORITY CLAIMED
Taiwan, R.O.C.	89110235	May 26, 2000	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

I hereby appoint the following attorneys and/or agents to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Eric L. Prahl, Reg. No. 32,590, and Y. Rocky Tsao, Reg. No. 34,053; Frank R. Occhiuti, Reg. No. 35,306.

Address all telephone calls to Eric L. Prahl at telephone number 617/542-5070.

Address all correspondence to Eric L. Prahl, Fish & Richardson P.C., 225 Franklin Street, Boston, MA 02110-2804.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.

Full Name of Inventor: Wei-Yu LO

Inventor's Signature: Wei-Yu LO Date: 11/06/2000

Residence Address: Same as Post Office Address (Below)

Citizen of: Taiwan, R.O.C.

Post Office Address: 4F, No. 8, Alley 1, Lane 102, Sec. 2, Tung-Hua Rd., Peitou District, Taipei, Taiwan, R.O.C.

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PATENT

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Full Name of Inventor: Ming Ching LO

Inventor's Signature: Ming Ching Lo Date: NOV. 6, 2000

Residence Address: Same as Post Office Address (Below)

Citizen of: Taiwan, R.O.C.

Post Office Address: 13F, No. 187, Chang-Shu 1<sup>st</sup> Rd., Hischih, Taipei Hsien, Taiwan, R.O.C.

Full Name of Inventor: Pei-Ru LIAU

Inventor's Signature: Pei-Ru Lian Date: Nov. 07 '00

Residence Address: Same as Post Office Address (Below)

Citizen of: Taiwan, R.O.C.

Post Office Address: 2F, No. 318, Shih-Pai 2<sup>nd</sup> Rd., Taipei, Taiwan, R.O.C.

2410        2420        2430        2440        2450        2460  
 TCAGTTCCCTT TACGTTTGTT AGCTTTAACCA GCCTGCACAT GCACCACAGG CTCATAATCA  
  
 2470        2480        2490        2500        2510        2520  
 ACTTTCAAGG CTTTTTGCCA TAATTTGCC CATTCTGCTT GTGCTAAATA ATTATTTGAA  
  
 2530        2540        2550        2560        2570        2580  
 TTCTTAAAAT AACTTGATTT TACAAACAGC AACACATGCA AGTGTGATT ATATGACCG  
  
 2590        2600        2610        2620        2630        2640  
 TCTTGTTCAT TAACGGTAAT TTCCGTTGAA CGTAAATAAC CCAATAAATT TTTAGTCACT  
  
 2650        2660        2670        2680        2690        2700  
 TTTTTATAGC GAGTTAGCTT ATTAAGGCT TTAGTCAAAG CTCTTAAAGA CACTTTAAC  
  
 2710        2720        2730        2740        2750        2760  
 TCCTCTGCTG AATGAGCGTT TTTAACGGTT AAAGTTAAAA ACAAAAACCG TCCTTTAGGC  
  
 2770        2780        2790        2800        2810        2820  
 TCTCTTGCAA CTGCTTCCGC AATAATTGT TTTAACTGGC TCGAGTTTTT CATGCTCCCT  
  
 2830        2840        2850        2860        2870        2880  
 CTCCAATTAC ACAATGGACA CAATCGTTA TGACAAAACC ACGTTTGATA AAGTTTTAAG  
  
 2890        2900        2910        2920        2930        2940  
 TGCTCGCCAA TCTTACGAAA ACGCAAAACT TCACCACAAAC CCCGTACATC ATGTGCCCGT  
  
 2950        2960        2970        2980        2990        3000  
 TTAAATTCTA AGATTGCCAA ATATTCGGCA TAGCGCACAT TTTCAATCTT CCGTTCTCGC  
  
 3010        3020        3030        3040        3050        3060  
 CAAGGTCTAA CTTTGCCATT TTCAGTTTTA TCTTCAAAAAA TTTCTGACAT AAAAAGCTCC  
  
 3070        3080        3090        3100        3110        3120  
 TCCAGTTTAT CCACGTGAAG GAGCTGACTA TCTTTTCAA TAAGCTTATA ACCTTGACAT  
  
 3130        3140        3150        3160        3170        3180  
 CATAGGGCTT TTCCCCTAGA ATAGGCTATA AATCGAAAT GATAATCAAC TCACGTGTT  
  
 3190        3200        3210        3220        3230        3240  
 CGAGCGGCCA AACTAGGAAT TTGCACGTGG GTTTTATTT TGTCTTCTT TCAACCAATT  
  
 3250        3260        3270        3280        3290        3300  
 TATAACCCTA ATAATACACC AAAAGCCTAT AAAATCAATG GATACAAGCC CAATTAAGCC  
  
 3310        3320        3330        3340        3350        3360  
 TAATCAAGCT TGATTTAAA AAACTAGTIG TTGCTAATAG TATCAAGATA AGAAGAAAAC  
  
 3370        3380        3390        3400        3410        3420  
 GCCAAAAATT GCGTTTTAA ACCCCAAAAA GCAGATCAGC AAAAACCGCT GAACTGCTTT  
  
 3430        3440        3450        3460        3470        3480  
 TTTTAAACCG TGGCTTTCAG CCACACTGAC CAGCTGAACC AGCTGGACCG TAACGCTTGC  
  
 3490        3500        3510        3520        3530        3540  
 CGCCGCTGGG CTCGGGAAAA CAAGGGCTTG TTTTCCAAGA CGTCAGGCCTT TTGGTATTGT  
  
 3550        3560        3570        3580        3590        3600  
 CTAGTCTATC AACTCCTTAA AGCCTCCAAG AGGGGCTAAT ATCGCCTGTA AGGCTCAATA

FIG. 6C

3610        3620        3630        3640        3650        3660  
 AGCCCCCTCTA AGTCGATTAA CCGTTGACAG ACAGTTAGAT AGCTAACTGT TAGCTAAAAT  
  
 3670        3680        3690        3700        3710        3720  
 CGCTTAGAAC GCAAATAAGA GCCTTTAAAAA TTAACGTTCA AAAATAAAAAA AGTTCGAAGG  
  
 3730        3740        3750        3760        3770        3780  
 AGCTAGCGAC TGAACTTATT TATTTTTGAA TGTTCCAAAC TGACGCAAGT CAGTTACGTT  
  
 3790        3800        3810        3820        3830        3840  
 TGAGCAACGC GAAATCTGAT GCAGGTTTTG ATGGGTTTAG CACAACACAA CTTCATGTTG  
  
 3850        3860        3870        3880        3890        3900  
 TGTGTAAGTG CGCACTACAT GATAATGCGC ACTACATGAT AATGCGCACT ACATGATAAT  
  
 3910        3920        3930        3940        3950        3960  
 GTGCGCACTA CATGATAATG CGCACTACAT GATAATGTAC ATGATAATGT GCGCACTACA  
  
 3970        3980        3990        4000        4010        4020  
 TGATAATGCG CACTACATGA TAATGCGCAC TACATGATAA TGCGCACTAC ATGATAATGC  
  
 4030        4040        4050        4060        4070        4080  
 GCACTACATG ATAATGCGCA CTACATGATA ATGCGCACTA CATGATAATG TGCACTTACA  
  
 4090        4100        4110        4120        4130        4140  
 CTCCAAATAA ATTGGAGTAA TGCTAAAACC TGTATCAGAA GTCAGCAAGC TGACAACAAA  
  
 4150        4160        4170        4180        4190        4200  
 AAAGGGATAT GCCAACGGAT TTACCGTTGA TCTCCCGATC CCCTATGGTC GACTCTCAGT  
  
 4210        4220        4230        4240        4250        4260  
 ACAATCTGCT CTGATGCCGC ATAGTTAACG CAGTATCTGC TCCCTGCTTG TGTGTTGGAG  
  
 4270        4280        4290        4300        4310        4320  
 GTCGCTGAGT AGTGCACGAG CAAAATTAA GCTACAACAA GGCAAGGCTT GACCGACAAT  
  
 4330        4340        4350        4360        4370        4380  
 TGCATGAAGA ATCTGCTTAG GGTTAGGCGT TTTGCGCTGC TTCGTTAGAA GCAAACATAAG  
  
 4390        4400        4410        4420        4430        4440  
 AGTGTGTGTA GTAGTGCAGT ATCTTAAAT TTTGTATAAT AGGAATTGAA GTTAAATTAG  
  
 4450        4460        4470        4480        4490        4500  
 ATGCTAAAAAA TTGTAAATTAA AGAAGGAGTG ATTACATGAT TGGCAGCCAG TCTCCGGGCA  
  
 4510        4520        4530        4540        4550        4560  
 ATTAATGAAC TTGGACATGG TTGACGACCC GGTCTTGCA AGCCGAATTG GACCACACTG  
  
 4570        4580        4590        4600        4610        4620  
 GCGGCCGTTA CTAGGGTATC GATCCGATAAA AAAGTTAGGC GACGGCTTGT CCCTGGTGCC  
  
 4630        4640        4650        4660        4670        4680  
 AGCAGACGGT AAGGTCTACG CGCCATTGTC CGGTACTGTC CGCCAGCTGG CCAAGACCCG  
  
 4690        4700        4710        4720        4730        4740  
 GCACTCGATC GTCCTGGAAA ATGAACATGG GGTCTTGGTC TTGATTCAACC TTGGCCTGGG  
  
 4750        4760        4770        4780        4790        4800  
 CACGGTCAAA TTAAACGGGA CTGGCTTGT CAGCTATGTT GAAGAGGGCA GCCAGGTAGA

FIG. 6D

4810	4820	4830	4840	4850	4860
AGCCGGCCAG	CAGATCTTGG	AATTCTGGGA	CCCGGCGATC	AAGCAGGCCA	AGCTGGACGA
4870	4880	4890	4900	4910	4920
CACGGTAATC	GTGACCGTCA	TCAACAGCGA	AACTTTCACA	AATAGCCAGA	TGCTCTTGCC
4930	4940	4950	4960	4970	4980
GATCGGCCAC	AGCGTCCAAG	CCCTGGATGA	TGTATTCAAG	TTAGAAGGGA	AGAATTAGAA
4990	5000	5010	5020	5030	5040
AATGAGCAAT	AAGTTAGTAA	AAGAAAAAAG	AGTTGACCAG	GCAGACCTGG	CCTGGCTGAC
5050	5060	5070	5080	5090	5100
TGACCCGGAA	GTTCACGAAG	TCAATACAAT	TCCCCCGCAC	TCCGACCATG	AGTCCTTCCA
5110	5120	5130	5140	5150	5160
AAGCCAGGAA	GAACCTGGAGG	AGGGCAAGTC	CAGTTAGTG	CAGTCCCTGG	ACGGGGACTG
5170	5180	5190	5200	5210	5220
GCTGATTGAC	TACGCTGAAA	ACGGCCAGGG	ACCAGTCAAC	TTCTATGCAG	AAGACTTTGA
5230	5240	5250	5260	5270	5280
CGATAGCAAT	TTTAAGTCAG	TCAAAGTACC	CGGCAACCTG	GAACTGCAAG	GCTTGGCCA
5290	5300	5310	5320	5330	5340
GCCCCAGTAT	GTCAACGTCC	AATATCCATG	GGACGGCAGT	GAGGAGATT	TCCCGCCCCA
5350	5360	5370	5380	5390	5400
AATTCCAAGC	AAAAATCCGC	TCGCTTCTTA	TGTCAGATA	TTTGACCTGG	ATGAAGCTTT
5410	5420	5430	5440	5450	5460
CTGGGACAAG	GAAGTCAGCT	TGAAGTTTGA	CGGGGCGGCA	ACAGCCATCT	ATGTCTGGCT
5470	5480	5490	5500	5510	5520
GAACGGCCAC	TTCGTCGGCT	ACGGGGAAAGA	CTCCTTTACC	CCAAGCGAGT	TTATGGTTAC
5530	5540	5550	5560	5570	5580
CAAGTTCCCTC	AAGAAAGAAA	ATAACCGCCT	GGCAGTGGCT	CTCTACAAGT	ATTCTTCCGC
5590	5600	5610	5620	5630	5640
CTCCCTGGCTG	GAAGACCAGG	ACTTCTGGCG	CATGTCTGGT	TTGTTCAGAT	CAGTGAATCT
5650	5660	5670	5680	5690	5700
TCAGGCCAAG	CCGGGTCTGC	ACTTGGAGGA	CCTTAAGCTT	ACGGCCAGCT	TGACCGATAA
5710	5720	5730	5740	5750	5760
CTACCAAAAA	GGAAAGCTGG	AAGTCGAAGC	CAATATTGCC	TACCGCTTGC	CAAATGCCAG
5770	5780	5790	5800	5810	5820
CTTTAAGCTG	GAAGTGCAGG	ATAGTGAAGG	TGACTTGGTT	GCTGAAAAGC	TGGGCCAAT
5830	5840	5850	5860	5870	5880
CAGCTGGAAT	TCACTCTGGC	TGATTGCCA	GTAGCTGCCT	GGAGCGCGGA	
5890	5900	5910	5920	5930	5940
AAAGCCTAAC	CTTTACCAGG	TCCGCCTGTA	TTTATACCA	GCAGGCAGCC	TCTTAGAGGT
5950	5960	5970	5980	5990	6000
TAGCCGGCAG	GAAGTGGGTT	TCCGCAACTT	TGAACAAAAA	GACGGGATTA	TGTACCTAA

FIG. 6E

6010	6020	6030	6040	6050	6060
CGGCCAGCGG	ATCGTCTCA	AGGGGGCCAA	CCGGCACGAA	TTTGACAGTA	AGTTGGTCG
6070	6080	6090	6100	6110	6120
GGCTATCACG	GAAGAGGATA	TGATCTGGGA	CATCAAGACC	ATGAAGCGAA	GCAACATCAA
6130	6140	6150	6160	6170	6180
TGCTGTCCGC	TGCTCTCACT	ACCCGAACCA	GTCCCCTTTT	TACCGGCTCT	GTGACAAGTA
6190	6200	6210	6220	6230	6240
CGGCCTTAC	GTCATTGATG	AAGCTAACCT	GGAAAGCCAC	GGCACCTGGG	AAAAAGTGGG
6250	6260	6270	6280	6290	6300
GGGGCACGAA	GATCCTAGCT	TCAATGTTCC	AGGCGATGAC	CAGCATTGGC	TGGGAGCCAG
6310	6320	6330	6340	6350	6360
CTTATCCCGG	GTGAAGAACAA	TGATGGCTCG	GGACAAGAAC	CATGCTTCAA	TCCTAATCTG
6370	6380	6390	6400	6410	6420
GTCTTAGGC	AATGAGTCTT	ACGCCGGCAC	TGTCTTGCC	CAAATGGCTG	ATTACGTCCG
6430	6440	6450	6460	6470	6480
GAAGGCTGAT	CCGACCCGGG	TTCAGCACTA	TGAAGGGGTG	ACCCACAACC	GGAAGTTTGA
6490	6500	6510	6520	6530	6540
CGACGCCACC	CAGATTGAAA	GCCGGATGTA	TGCTCCGGCC	AAGGTAATTG	AAGAATACTT
6550	6560	6570	6580	6590	6600
GACCAATAAA	CCAGCCAAGC	CATTTATCTC	AGTTGAATAC	GCTCACGCCA	TGGGCAACTC
6610	6620	6630	6640	6650	6660
CGTCGGTGAC	CTGGCCGCCT	ACACGGCCCT	GGAAAAATAC	CCCCACTACC	AGGGGGCTT
6670	6680	6690	6700	6710	6720
CATCTGGGAC	TGGATTGACC	AAGGACTGGA	AAAAGACGGG	CACCTGCTTT	ATGGGGCGA
6730	6740	6750	6760	6770	6780
CTTCGATGAC	CGGCCAACCG	ACTATGAATT	CTGCGGAAAC	GGCCTGGTCT	TTGCTGACCG
6790	6800	6810	6820	6830	6840
GAATGAATCG	CCGAAACTGG	CTAATGTCAA	GGCCCTTAC	GCCAACCTTA	AGTTAGAACT
6850	6860	6870	6880	6890	6900
AAAAGATGGG	CAGCTCTTCC	TCAAAAACGA	CAATTATTTT	ACCAACAGCT	CATCTTACTA
6910	6920	6930	6940	6950	6960
CTTCTTGACT	AGTCTTTGG	TCGATGGCAA	GTTGACCTAC	CAGAGCCGGC	CTCTGACCTT
6970	6980	6990	7000	7010	7020
TGGCCTGGAG	CCTGGGAAT	CCGGGACCTT	TGCCCTGCCT	TGGCCGGAAAG	TCGCTGATGA
7030	7040	7050	7060	7070	7080
AAAAGGGGAG	GTCGTCTACC	GGGTAAACGGC	CCACTTAAAAA	GAAGACTTGC	CTTGGCGGA
7090	7100	7110	7120	7130	7140
TGAGGGCTTC	ACTGTGGCTG	AAGCAGAAGA	AGTAGCTCAA	AAGCTGCCG	AATTTAAGCC
7150	7160	7170	7180	7190	7200
GGAAGGGCGG	CCAGATTTAG	TTGATTCCGA	CTACAACCTA	GGCCTGAAAG	GAAATAACTT

FIG. 6F

7210	7220	7230	7240	7250	7260
CCAAATTCTC	TTCTCCAAGG	TCAAGGGCTG	GCCGGTTCC	CTCAAGTATG	CCGGTAGGGA
7270	7280	7290	7300	7310	7320
ATACTTGAAG	CGGCTGCCGG	AATTTACCTT	CTGGCGGGCC	CTGACGGACA	ACGACCGGGG
7330	7340	7350	7360	7370	7380
AGCTGGTTAC	GGCTATGATC	TGGCCCGGTG	GGAAAATGCC	GGCAAGTATG	CCCGCTTGAA
7390	7400	7410	7420	7430	7440
AGACATCAGC	TGCGAGGTCA	AGGAAGACTC	CGTITTGTC	AAGACTGCCT	TTACGTTGCC
7450	7460	7470	7480	7490	7500
TGTCGCCTTA	AAGGGTGATT	TAACCGTGAC	CTATGAAGTC	GATGGACGGG	GCAAGATTGC
7510	7520	7530	7540	7550	7560
TGTAACAGCT	GACTTCCCAG	GCGCGGAAGA	AGCTGGTCTC	TTGCCAGCCT	TTGGCTTGAA
7570	7580	7590	7600	7610	7620
CCTGGCCCTG	CCAAAAGAAC	TGACCGATTA	CCGCTACTAT	GGTCTGGGAC	CTAATGAGAG
7630	7640	7650	7660	7670	7680
CTACCCAGAC	CGCTTGGAAAG	GTAATTACCT	GGGCATCTAC	CAGGGAGCGG	TAAAAAAGAA
7690	7700	7710	7720	7730	7740
CTTAGCCCCA	TATCGTCCGC	AGGAAACGGG	CAACCGGAGC	AAGGTTCGCT	GGTACCAGCT
7750	7760	7770	7780	7790	7800
CTTGATGAA	AAGGGCGGCT	TGGAATTAC	GGCCAATGGG	GCAGACTTGA	ACTTGTCTGC
7810	7820	7830	7840	7850	7860
TTIGCCATAT	TCTGCCGCC	AAATTGAAGC	AGCGGACCAC	GCTTTGAAC	TGACTAACAA
7870	7880	7890	7900	7910	7920
TTACACTTGG	GTTAGAGCCT	TAAGCGCCA	GATGGGGTC	GGCGGGGATG	ACTCCTGGGG
7930	7940	7950	7960	7970	7980
GCAGAAGGTC	CACCCGGAAT	TCTGCCTGGA	TGCTAAAAAA	GCCCGCCAGC	TTCGCCTGGT
7990	8000	8010	8020	8030	8040
GATTCAAGCCC	CITTTACTAA	AATAAAATGCT	ACAATTGACT	TAACAGGATG	AAATTTTAGT
8050	8060	8070	8080	8090	8100
AAAAGCAAAG	CGAGTGAGGA	AGATGGCAAC	GATCAGAGAA	GTGCCAAGGC	AGCCGGCGTG
8110	8120	8130	8140	8150	8160
TCGCTAGCGA	CGGTC	.....	.....	.....	.....

FIG. 6G